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J. Chris Russell

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EXAMINER

HICKS, MICHAEL J

ART UNIT

PAPER NUMBER

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/844,161	Applicant(s) RUSSELL, J. CHRIS	
	Examiner Michael J. Hicks	Art Unit 2165	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 July 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-8, 13, 14 and 20-26 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-8, 13-14, and 20-26 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 28 August 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|--|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input checked="" type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Claims 1-8, 13-14, and 20-26 pending.

Response to Arguments

2. Applicant's arguments filed 07/05/2006 have been fully considered but they are not persuasive.

As per Applicants arguments that Examiner fails to establish a proper motivation to combine the teachings of Brewer and Morimoto, Examiner respectfully disagrees. On page 2 of Applicants specification, paragraph 6 reads:

The present invention provides both for coding media and for physically tracking the media through various stages of production or other handling and for associating responsible individuals with movement of media from one location to another. Each media piece, for example, individual videotapes or discs may be identified with a unique number and a record in a database is established therefore. The next element of the record comprises an identification of the content on the physical media. As the media is moved, for example, from a vault to a cutting room, the system records the scannable indicia on the media and also scans an identity of an agent, usually an individual, moving the media from one place to the other. At the next place it is scanned in and scanners are integrated into the system so that as media moves into and out of one location and to another, a record associated with that particular piece of media is built in the database. Videotapes or other media are also labeled with warning labels. Burn-in warnings and unique identifiers may be encoded into the video, and then removed after production is complete. Steganographic encoding embeds invisible, unique identifiers into the audio and video. Preferably, vendors and other critical participants in the production process are outfitted for the inclusion in the tracking and identification system to further maintain records on movement and processing of the media.

Note that although mention is made of the purpose of both the tracking via indicia on the media (e.g. that which is taught by Brewer) and the stenographic encoding (e.g.

that which is taught by Morimoto), the only overarching theme linking the two purposes is the prevention of piracy. As it has been shown in the previously submitted office actions that the teachings of both Brewer and Morimoto are intended to prevent piracy or theft of goods (e.g. media), Examiner submits that the presented motivation to combine is sufficient, as it is equivalent to the motivation to combine presented by Applicant in Applicant's own specification.

As per the amendments made to the claims, see below for amended rejections, which include a basis for rejection of the additional limitations added, via amendment, to the claims.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-8, 13-14, and 20-26 rejected under 35 U.S.C. 103(a) as being unpatentable over Brewer et al. ("Intelligent Tracking in Manufacturing", Journal of Intelligent Manufacturing (1999) Iss. 10, Pgs. 245-250, Kluwer Academic Publishers, 1999 and referred to hereinafter as Brewer) in view of Morimoto ("Digital Watermarking Technology with Practical Applications", Information Science Special Issue on Multimedia Informing Technologies – Part 1, Vol. 2, No. 4, 1999).

As per Claim 1, Brewer discloses an integrated media production security system comprising: a database for storing records associated with a plurality of media (i.e. *"For example, suppose an RFID reader is integrated with a computer attached to a wireless telecommunications device. The result is a capability to read a tag attached to a truck on a toll road and automatically bill the carriers account...Currently, the system builds the manifest of outgoing goods by simply scanning a products barcode and entering an amount. Future plans include the use of this system in their receiving department as well."* The preceding text excerpt clearly indicates that a database exists (e.g. a system in which data may be entered about a variety of products and which holds information which allows the system to identify products by their barcodes/indicia) which store records about associated with a plurality of media (e.g. barcode identification, quantity, and location).) (Figure 3; Page 245, Column 1, Paragraph 4; Page 247, Column 2, Paragraph 1); a tracking station to read indicia on media for responding to arrival at and departure from the tracking station (i.e. *"One antenna was placed at each of the four workstations. The RFID reader, stationed remotely from the antennas, polled each of the four antennas once per second, for a total of four potential reads per second. Hardware and software limited the RFID reader to only four reads per second. It was the responsibility of each worker to pass the RFID tag, attached to an accompanying paperwork folder that was unique to each lot, by the antenna in that area. In this way, the times when the lot entered the workstation and when it left could be tracked."* The preceding text excerpt clearly indicates that indicia (e.g. RFID tags) may be placed on media and read by a tracking station to indicate arrival and departure from a tracking station (e.g. workstation).) (Page 249, Column 2, Paragraph 3), said tracking station further comprising means for identifying an agent moving the media to or from the tracking station (i.e. *"For example, suppose an RFID reader is integrated with a computer attached to a wireless telecommunications device. The result is a capability to read a tag attached to a truck on a toll road and automatically bill the carriers account."* The preceding text excerpt clearly indicates that the

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tracking stations may also be equipped with the capability to identify the agent moving the media to or from the tracking station.) (Page 245, Column 1, Paragraph 4); a client for receiving information from said tracking station for providing records to said database (i.e. *"For example, suppose an RFID reader is integrated with a computer attached to a wireless telecommunications device. The result is a capability to read a tag attached to a truck on a toll road and automatically bill the carriers account...Currently, the system builds the manifest of outgoing goods by simply scanning a products barcode and entering an amount. Future plans include the use of this system in their receiving department as well."* The preceding text excerpt clearly indicates that records may be provided to the database through a client at the tracking stations.) (Figure 3; Page 245, Column 1, Paragraph 4; Page 247, Column 2, Paragraph 1); and wherein the indicia on the media and the information identifying the agent is collectively used to determine location and control of the media i.e. *"One antenna was placed at each of the four workstations. The RFID reader, stationed remotely from the antennas, polled each of the four antennas once per second, for a total of four potential reads per second, Hardware and software limited the RFID reader to only four reads per second. It was the responsibility of each worker to pass the RFID tag, attached to an accompanying paperwork folder that was unique to each lot, by the antenna in that area. In this way, the times when the lot entered the workstation and when it left could be tracked."* The preceding text excerpt clearly indicates that the indicia (e.g. RFID tags) and information identifying the agent may be used in order to determine the location of the media, and also the control (e.g. the agent who currently has control of the media) of the media.) (Page 249, Column 2, Paragraph 3).

Brewer fails to disclose a recording station in communication with said database to embed visible identifiers into contents of each of said plurality of media and to record said identifiers in said database and that the visible identifiers also add to the collective identification of the location and control of the media.

Morimoto discloses a recording station in communication with said database to embed visible identifiers into contents of each of said plurality of media (i.e. *"This unique form of watermarking technology by IBM allows the content owners to embed a visible shape or logo mark such as a company's logo on top of the image. The mark is removed (the watermark is reversed) only with the application of an appropriate "decryption" key and watermark remover software."* The preceding text excerpt clearly indicates visible identifiers (e.g. visible watermarks) may be embedded into the contents of the media.) (Page 108, Column 2, Paragraph 5; Page 109, Column 1, Paragraph 1) and to record said identifiers in said database (i.e. *"This unique form of watermarking technology by IBM allows the content owners to embed a visible shape or logo mark such as a company's logo on top of the image. The mark is removed (the watermark is reversed) only with the application of an appropriate "decryption" key and watermark remover software."* The preceding text excerpt clearly indicates that the visible identifiers (e.g. visible watermarks) as well as the media they are associated with and the proper decryption keys are all stored in the database for later use.) (Page 108, Column 2, Paragraph 5; Page 109, Column 1, Paragraph 1), and that the visible identifiers also add to the collective identification of the location and control of the media (i.e. *"With this visible watermark on the image, the content becomes self-protective, and content owners can distribute the entire image as a sample to various open media or to the internet. When a user wants a clean copy of the image, all he/she needs to be is request a "decryption" key and pay some fee for it."* The preceding text excerpt clearly indicates that the visible identifiers may also add to the collective identification of the location and control of the media (e.g. if the identifier is present, and has not been removed, the media is still in production, and not located on an end users system.) (Page 109, Column 1, Paragraph 3).

It would have been obvious to one skilled in the art at the time of Applicants invention to modify the teachings of Brewer with the teachings of Morimoto to include a record station in communication with said database to embed visible identifiers into contents of each of said plurality of media and to record said identifiers in said database

and that the visible identifiers also add to the collective identification of the location and control of the media with the motivation of providing a technical solution to be used for copy write protection and tracking of digital media (Morimoto, Page 107, Column 1, Paragraph 1; Column 2, Paragraph 1).

As per Claim 2, Brewer discloses said database further comprises means for storing content information records associated with each piece of media (i.e. *"Other forms of information may be added to the ID number of the tag. Read/write memory is an option, allowing dynamic information to be stored with the associated asset being tracked... Currently, the system builds the manifest of outgoing goods by simply scanning a products barcode and entering an amount. Future plans include the use of this system in their receiving department as well."* The preceding text excerpt clearly indicates that the database receives content information records associated with each piece of media.) (Page 247, Column 1, Paragraph 2; Column 2, Paragraph 1) and wherein said database is provided with a software structure associating content records and movement records by media identification (i.e. *"Currently, the system builds the manifest of outgoing goods by simply scanning a products barcode and entering an amount. Future plans include the use of this system in their receiving department as well."* The preceding text excerpt clearly indicates that the goods/media are associated with the barcode and that tracking/movement information is recorded to the database as well as content information (e.g. the type and quantity of said goods/media), which are identified to the database by the barcode.) (Page 247, Column 2, Paragraph 1).

As per Claim 3, Brewer fails to disclose a visible identifier embedded into content of one of said plurality of media is removed after production is completed.

Morimoto discloses a visible identifier embedded into content of one of said plurality of media is removed after production is completed (i.e. *"With this visible watermark on the image, the content becomes self-protective, and content owners can distribute the entire image as a sample to various open media or to the internet. When a user wants a clean copy of the image, all he/she needs to be is request a "decryption" key and pay some fee for it."* The preceding text excerpt clearly indicates that a sample (e.g. incomplete) version may be distributed with the identifier present, but the watermark is removed before a completed (e.g. finished) version is distributed.) (Page 109, Column 1, Paragraph 3).

It would have been obvious to one skilled in the art at the time of Applicants invention to modify the teachings of Brewer with the teachings of Morimoto to include a visible identifier embedded into content of one of said plurality of media is removed after production is completed with the motivation of providing a technical solution to be used for copy write protection and tracking of digital media (Morimoto, Page 107, Column 1, Paragraph 1; Column 2, Paragraph 1).

As per Claim 4, Brewer fails to disclose a marking system to embed an invisible watermark into content of each of said plurality of media.

Morimoto discloses a marking system to embed an invisible watermark into content of each of said plurality of media (i.e. *"This group of technologies provides methods to "imprints" additional data or messages into multi-media contents such as still image, video, and audio data. Generally, the imprinted data is invisible (or inaudible) to the ordinary users, and is difficult to be separated from the host media."* The preceding text excerpt clearly indicates that an invisible watermark (e.g. audio or video signal) is imprinted into the content of the media using a marking system.) (Page 107, Column 2, Paragraph 1).

It would have been obvious to one skilled in the art at the time of Applicants invention to modify the teachings of Brewer with the teachings of Morimoto to include a marking system to embed an invisible watermark into content of each of said plurality of media with the motivation of providing a technical solution to be used for copy write protection and tracking of digital media (Morimoto, Page 107, Column 1, Paragraph 1; Column 2, Paragraph 1).

As per Claim 5, Brewer discloses a shipping and receiving station (i.e. *"Currently, the system builds the manifest of outgoing goods by simply scanning a products barcode and entering an amount. Future plans include the use of this system in their receiving department as well."* The preceding text excerpt clearly indicates shipping (e.g. outgoing) and receiving stations for the goods/media.) (Page 247, Column 2, Paragraph 1).

Brewer fails to disclose a duplication station.

Morimoto discloses a duplication station (i.e. *"Watermarking technology can be viewed as a way to provide a secure data channel along with the contents without modifying the installed-base Consumer Electronics devices...The watermarking data embedded into the video is difficult to remove without damaging the quality of the content because it is carefully 'woven' into the visible part of the video data."* The preceding text excerpt clearly indicates that the watermark is inserted into the video data at a duplication station, which would be necessary to embed the watermark in to the video.) (Page 109, Column 1, Paragraph 6, Column 2, Paragraph 1).

It would have been obvious to one skilled in the art at the time of Applicants invention to modify the teachings of Brewer with the teachings of Morimoto to include a duplication station with the motivation of providing a technical solution to be used for

copy write protection and tracking of digital media (Morimoto, Page 107, Column 1, Paragraph 1; Column 2, Paragraph 1)

As per Claim 6, Brewer fails to disclose a video source unit selectively coupled to the duplication station and to said recording station, a recording deck to receive outputs from said marking system, and said duplication and said recording station each providing a video source for said marking system.

Morimoto discloses a video source unit selectively coupled to the duplication station and to said recording station, a recording deck to receive outputs from said marking system, and said duplication and said recording station each providing a video source for said marking system (i.e. *"Watermarking technology can be viewed as a way to provide a secure data channel along with the contents without modifying the installed-base Consumer Electronics devices...The watermarking data embedded into the video is difficult to remove without damaging the quality of the content because it is carefully 'woven' into the visible part of the video data."* Note that in order to embed a watermark into a DVD, or other like media (which both the disclosures of the instant application and the instant reference refer to) it is necessary to involve these steps. Whether the recording stations, marking systems, and recording decks, etc. be contained within a computer system, or in separate pieces of equipment, a watermark cannot be embedded in media without having some source of original content (i.e. the video contents and duplication station) and some watermarking source (e.g. the marking system) which will be combined to form the final watermarked video product. Because of this, the fact that the reference refers to the process is enough to inherently indicate the setup disclosed in Claim 6.) (Page 109, Column 1, Paragraph 6, Column 2, Paragraph 1).

It would have been obvious to one skilled in the art at the time of Applicants invention to modify the teachings of Brewer with the teachings of Morimoto to include a

video source unit selectively coupled to the duplication station and to said recording station, a recording deck to receive outputs from said marking system, and said duplication and said recording station each providing a video source for said marking system with the motivation of providing a technical solution to be used for copy write protection and tracking of digital media (Morimoto, Page 107, Column 1, Paragraph 1; Column 2, Paragraph 1).

As per Claim 7, Brewer discloses means for providing data indicative of operations performed on selected media to said database (i.e. *"For example, suppose an RFID reader is integrated with a computer attached to a wireless telecommunications device. The result is a capability to read a tag attached to a truck on a toll road and automatically bill the carriers account...Other forms of information may be added to the ID number of the tag. Read/write memory is an option, allowing dynamic information to be stored with the associated asset being tracked..."* The preceding text excerpt clearly indicates that records indicative of other operation performed at the tracking stations, such as billing operations or the addition of dynamic information, are provided.) (Page 245, Column 1, Paragraph 4; Page 247, Column 1, Paragraph 2).

As per Claim 8, Brewer discloses said video source unit comprises a hard drive, and wherein indicia for reading by a tracking station are affixed to said hard drive, wherein said tracking means further comprises means for reading indicia for said hard drive and wherein said database further comprises a data structure for storing information relative to said hard drive (i.e. *"Currently, the system builds the manifest of outgoing goods by simply scanning a products barcode and entering an amount. Future plans include the use of this system in their receiving department as well."* The above claim merely indicates that the 'goods' or

media which is being shipped and tracked using database records via the indicia attached thereto as above is a hard drive. As the media or goods to which the indicia is attached has no bearing on how the goods or media are tracked and recorded in the database, the fact that the goods or media are a hard drive which contains video information is given no patentable weight.) (Page 247, Column 2, Paragraph 1).

As per Claim 13, Brewer discloses a method for an integrated media production security system comprising: tracking movement of media to and from tracking stations (i.e. *"One antenna was placed at each of the four workstations. The RFID reader, stationed remotely from the antennas, polled each of the four antennas once per second, for a total of four potential reads per second. Hardware and software limited the RFID reader to only four reads per second. It was the responsibility of each worker to pass the RFID tag, attached to an accompanying paperwork folder that was unique to each lot, by the antenna in that area. In this way, the times when the lot entered the workstation and when it left could be tracked."* The preceding text excerpt clearly indicates that indicia (e.g. RFID tags) may be placed on media and read by a tracking station to indicate arrival and departure from a tracking station (e.g. workstation.) (Page 249, Column 2, Paragraph 3); tracking an agent associated with each movement (i.e. *"For example, suppose an RFID reader is integrated with a computer attached to a wireless telecommunications device. The result is a capability to read a tag attached to a truck on a toll road and automatically bill the carriers account."* The preceding text excerpt clearly indicates that the tracking stations may also be equipped with the capability to identify the agent moving the media to or from the tracking station.) (Page 245, Column 1, Paragraph 4); providing a data record indicative of the movement and agent to a database (i.e. *"For example, suppose an RFID reader is integrated with a computer attached to a wireless telecommunications device. The result is a capability to read a tag attached to a truck on a toll road and automatically bill the carriers account."* The preceding text excerpt clearly indicates that the tracking stations may also be equipped

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with the capability to provide records (e.g. in this case billing and identification records) to a database.)

(Page 245, Column 1, Paragraph 4); providing to said database a record indicative of content

associated with a media identification (i.e. *"Other forms of information may be added to the ID*

number of the tag. Read/write memory is an option, allowing dynamic information to be stored with the

associated asset being tracked... Currently, the system builds the manifest of outgoing goods by simply

scanning a products barcode and entering an amount. Future plans include the use of this system in their

receiving department as well." The preceding text excerpt clearly indicates that the database receives

content information records associated with each piece of media.) (Page 247, Column 1, Paragraph 2;

Column 2, Paragraph 1); associating in said database records indicative of movement with

a record indicative of content of the particular media (i.e. *"For example, suppose an RFID*

reader is integrated with a computer attached to a wireless telecommunications device. The result is a

capability to read a tag attached to a truck on a toll road and automatically bill the carriers

account...Currently, the system builds the manifest of outgoing goods by simply scanning a products

barcode and entering an amount. Future plans include the use of this system in their receiving

department as well." The preceding text excerpt clearly indicates that records indicative of movement of

said media may be provided to the database through a client at the tracking stations which identifies the

content of said media, thereby associating the two.) (Figure 3; Page 245, Column 1, Paragraph 4; Page

247, Column 2, Paragraph 1); and further providing data indicative of an operation performed

on said media at a station associated with the record of movement of the media (i.e. *"For*

example, suppose an RFID reader is integrated with a computer attached to a wireless

telecommunications device. The result is a capability to read a tag attached to a truck on a toll road and

automatically bill the carriers account...Other forms of information may be added to the ID number of the

tag. Read/write memory is an option, allowing dynamic information to be stored with the associated asset

being tracked..." The preceding text excerpt clearly indicates that records indicative of other operation

performed at the tracking stations, such as billing operations or the addition of dynamic information, are provided.) (Page 245, Column 1, Paragraph 4; Page 247, Column 1, Paragraph 2).

Brewer fails to disclose the media identification and embedded data in said content.

Morimoto discloses the media identification and embedded data in said content (i.e. *"This group of technologies provides methods to "imprints" additional data or messages into multi-media contents such as still image, video, and audio data. Generally, the imprinted data is invisible (or inaudible) to the ordinary users, and is difficult to be separated from the host media."* The preceding text excerpt clearly indicates that an invisible watermark (e.g. audio or video signal) is imprinted into the content of the media using a marking system.) (Page 107, Column 2, Paragraph 1).

It would have been obvious to one skilled in the art at the time of Applicants invention to modify the teachings of Brewer with the teachings of Morimoto to include the media identification and embedded data in said content with the motivation of providing a technical solution to be used for copy write protection and tracking of digital media (Morimoto, Page 107, Column 1, Paragraph 1; Column 2, Paragraph 1).

As per Claim 14, Brewer fails to disclose a recording and a duplication station are provided and further comprising: selectively duplicating video source on media at said duplication station or recording from a video source onto a recording media at a recording station and connecting an marking station to each of said recording stations and duplication station to steganographically encode the recording or duplication of said video source.

Morimoto discloses a recording and a duplication station are provided and further comprising: selectively duplicating video source on media at said duplication station or recording from a video source onto a recording media at a recording station and connecting an marking station to each of said recording stations and duplication station to steganographically encode the recording or duplication of said video source (i.e.

"Watermarking technology can be viewed as a way to provide a secure data channel along with the contents without modifying the installed-base Consumer Electronics devices...The watermarking data embedded into the video is difficult to remove without damaging the quality of the content because it is carefully 'woven' into the visible part of the video data." Note that in order to embed a watermark into a DVD, or other like media (which both the disclosures of the instant application and the instant reference refer to) it is necessary to involve these steps. Whether the recording stations, marking systems, and recording decks, etc. be contained within a computer system, or in separate pieces of equipment, a watermark cannot be embedded in media without having some source of original content (i.e. the video contents and duplication station) and some watermarking source (e.g. the marking system) which will be combined to form the final watermarked video product. Because of this, the fact that the reference refers to the process is enough to inherently indicate the setup disclosed in Claim 6. Also note that watermarking is a form of stenographic encoding.) (Page 109, Column 1, Paragraph 6, Column 2, Paragraph 1).

It would have been obvious to one skilled in the art at the time of Applicants invention to modify the teachings of Brewer with the teachings of Morimoto to include a recording and a duplication station are provided and further comprising: selectively duplicating video source on media at said duplication station or recording from a video source onto a recording media at a recording station and connecting an marking station to each of said recording stations and duplication station to steganographically encode

the recording or duplication of said video source with the motivation of providing a technical solution to be used for copy write protection and tracking of digital media (Morimoto, Page 107, Column 1, Paragraph 1; Column 2, Paragraph 1).

As per Claim 20, Brewer fails to disclose embedding data into a video recording of said media and removing said data from said video recording of said media after production is complete.

Morimoto discloses embedding data into a video recording of said media (i.e. *"This unique form of watermarking technology by IBM allows the content owners to embed a visible shape or logo mark such as a company's logo on top of the image. The mark is removed (the watermark is reversed) only with the application of an appropriate "decryption" key and watermark remover software."* The preceding text excerpt clearly indicates visible identifiers (e.g. visible watermarks) may be embedded into the contents of video (e.g. images.) (Page 108, Column 2, Paragraph 5; Page 109, Column 1, Paragraph 1), and removing said data from said video recording of said media after production is complete (i.e. *"With this visible watermark on the image, the content becomes self-protective, and content owners can distribute the entire image as a sample to various open media or to the internet. When a user wants a clean copy of the image, all he/she needs to be is request a "decryption" key and pay some fee for it."* The preceding text excerpt clearly indicates that a sample (e.g. incomplete) version may be distributed with the identifier present, but the watermark is removed before a completed (e.g. finished) version is distributed.) (Page 109, Column 1, Paragraph 3).

It would have been obvious to one skilled in the art at the time of Applicants invention to modify the teachings of Brewer with the teachings of Morimoto to include embedding data into a video recording of said media and removing said data from said video recording of said media after production is complete with the motivation of

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providing a technical solution to be used for copy write protection and tracking of digital media (Morimoto, Page 107, Column 1, Paragraph 1; Column 2, Paragraph 1).

As per Claim 21, Brewer fails to disclose said data includes a unique identifier.

Morimoto discloses said data includes a unique identifier (i.e. *"The watermarks can be identified by some kind of 'keys' that are used to identify large number of individual contents uniquely."* The preceding text excerpt clearly indicates that the watermarks may be unique identifiers which can be identified with unique keys.) (Page 108, Column 1, Paragraph 3).

It would have been obvious to one skilled in the art at the time of Applicants invention to modify the teachings of Brewer with the teachings of Morimoto to include said data includes a unique identifier with the motivation of providing a technical solution to be used for copy write protection and tracking of digital media (Morimoto, Page 107, Column 1, Paragraph 1; Column 2, Paragraph 1).

As per Claim 22, Brewer fails to disclose said data further includes burn-in warnings.

Morimoto discloses said data further includes burn-in warnings (i.e. *"This desirable characteristic makes digital watermark an ideal technology to carry the signature of its owner, identification code, or copy control information that can travel with the content itself."* The preceding text excerpt clearly indicates that the watermark can include a burn-in warning (e.g. the signature of the owner).) (Page 107, Column 2, Paragraph 2).

It would have been obvious to one skilled in the art at the time of Applicants invention to modify the teachings of Brewer with the teachings of Morimoto to include

said data further includes burn-in warnings with the motivation of providing a technical solution to be used for copy write protection and tracking of digital media (Morimoto, Page 107, Column 1, Paragraph 1; Column 2, Paragraph 1).

As per Claim 23, Brewer fails to disclose embedding an invisible, unique identifier into said video recording and an audio recording of said media to enable subsequent analysis of a piece of media that has been copied without authorization.

Morimoto discloses embedding an invisible, unique identifier into said video recording and an audio recording of said media to enable subsequent analysis of a piece of media that has been copied without authorization. (i.e. *"This group of technologies provides methods to "imprints" additional data or messages into multi-media contents such as still image, video, and audio data. Generally, the imprinted data is invisible (or inaudible) to the ordinary users, and is difficult to be separated from the host media...In many cases, the watermark is used in addition to the content encryption, where the encryption provides the secure distribution method from the content owners to the receivers, and the watermark offers the content owners the opportunity to trace the contents and detect the unauthorized use or duplications."* The preceding text excerpt clearly indicates that the invisible, unique identifier (e.g. watermark placed in an audio or video recording) may be used to enable subsequent analysis of a piece of media which has been duplicated/copied without authorization.) (Page 107, Column 2, Paragraphs 1, 4; Page 108, Column 1, Paragraph 1).

It would have been obvious to one skilled in the art at the time of Applicants invention to modify the teachings of Brewer with the teachings of Morimoto to include embedding an invisible, unique identifier into said video recording and an audio recording of said media to enable subsequent analysis of a piece of media that has been copied without authorization with the motivation of providing a technical solution to

be used for copy write protection and tracking of digital media (Morimoto, Page 107, Column 1, Paragraph 1; Column 2, Paragraph 1).

As per Claim 24, Brewer discloses an integrated media production security system comprising: a database for storing records associated with media (i.e. *"For example, suppose an RFID reader is integrated with a computer attached to a wireless telecommunications device. The result is a capability to read a tag attached to a truck on a toll road and automatically bill the carriers account...Currently, the system builds the manifest of outgoing goods by simply scanning a products barcode and entering an amount. Future plans include the use of this system in their receiving department as well."* The preceding text excerpt clearly indicates that a database exists (e.g. a system in which data may be entered about a variety of products and which holds information which allows the system to identify products by their barcodes/indicia) which store records about associated with a plurality of media (e.g. barcode identification, quantity, and location).) (Figure 3; Page 245, Column 1, Paragraph 4; Page 247, Column 2, Paragraph 1); and a media processing system in communication with said database, said media processing system comprises a tracking station to read indicia on said media for responding to arrival at and departure from the tracking station (i.e. *"One antenna was placed at each of the four workstations. The RFID reader, stationed remotely from the antennas, polled each of the four antennas once per second, for a total of four potential reads per second. Hardware and software limited the RFID reader to only four reads per second. It was the responsibility of each worker to pass the RFID tag, attached to an accompanying paperwork folder that was unique to each lot, by the antenna in that area. In this way, the times when the lot entered the workstation and when it left could be tracked."* The preceding text excerpt clearly indicates that indicia (e.g. RFID tags) may be placed on media and read by a tracking station to indicate arrival and departure from a tracking station (e.g. workstation).) (Page 249, Column 2, Paragraph 3), and to identify an agent moving said disc to or from the tracking station (i.e. *"For example, suppose*

an RFID reader is integrated with a computer attached to a wireless telecommunications device. The result is a capability to read a tag attached to a truck on a toll road and automatically bill the carriers account." The preceding text excerpt clearly indicates that the tracking stations may also be equipped with the capability to identify the agent moving the media to or from the tracking station.) (Page 245, Column 1, Paragraph 4).

Brewer fails to disclose that the media may be audio or video recordings placed on a disk, and a recording station to embed data into said video recording and to record said data into said database.

Morimoto discloses the media may be audio or video recordings placed on a disk (i.e. "...I would like to focus on the watermark application that has much more public impact, namely DVD Copy Control." The preceding text excerpt clearly indicates that the media may be a DVD (e.g. audio and video recorded on a disk).) (Page 109, Column 1, Paragraph 4), and a recording station to embed data into said video recording and to record said data into said database (i.e. "This group of technologies provides methods to "imprints" additional data or messages into multi-media contents such as still image, video, and audio data. Generally, the imprinted data is invisible (or inaudible) to the ordinary users, and is difficult to be separated from the host media...In many cases, the watermark is used in addition to the content encryption, where the encryption provides the secure distribution method from the content owners to the receivers, and the watermark offers the content owners the opportunity to trace the contents and detect the unauthorized use or duplications." The preceding text excerpt clearly indicates that the invisible, unique identifier (e.g. watermark placed in an audio or video recording through the use of a recording station) may be used to enable subsequent analysis of a piece of media which has been duplicated/copied without authorization. Note that in order for the information to be used later to identify copy write disputes or identify unauthorized duplication, the information recorded in the watermark must also be recorded in the database.) (Page 107, Column 2, Paragraphs 1, 4; Page 108, Column 1, Paragraph 1).

It would have been obvious to one skilled in the art at the time of Applicants invention to modify the teachings of Brewer with the teachings of Morimoto to include the media may be audio or video recordings placed on a disk, and a recording station to embed data into said video recording and to record said data into said database with the motivation of providing a technical solution to be used for copy write protection and tracking of digital media (Morimoto, Page 107, Column 1, Paragraph 1; Column 2, Paragraph 1).

As per Claim 25, Brewer fails to disclose said data is a visible upon display of said video recording and is removed after production of a film including said video and audio recordings has been completed.

Morimoto discloses said data is a visible upon display of said video recording i.e. *"This unique form of watermarking technology by IBM allows the content owners to embed a visible shape or logo mark such as a company's logo on top of the image. The mark is removed (the watermark is reversed) only with the application of an appropriate "decryption" key and watermark remover software."* The preceding text excerpt clearly indicates visible identifiers (e.g. visible watermarks) may be embedded into the contents of video (e.g. images.) (Page 108, Column 2, Paragraph 5; Page 109, Column 1, Paragraph 1) and is removed after production of a film including said video and audio recordings has been completed (i.e. *"With this visible watermark on the image, the content becomes self-protective, and content owners can distribute the entire image as a sample to various open media or to the internet. When a user wants a clean copy of the image, all he/she needs to be is request a "decryption" key and pay some fee for it."* The preceding text excerpt clearly indicates that a sample (e.g. incomplete) version may be distributed with the identifier present, but the watermark is removed before a completed (e.g. finished) version is distributed.) (Page 109, Column 1, Paragraph 3).

It would have been obvious to one skilled in the art at the time of Applicants invention to modify the teachings of Brewer with the teachings of Morimoto to further include said data is a visible upon display of said video recording and is removed after production of a film including said video and audio recordings has been completed with the motivation of providing a technical solution to be used for copy write protection and tracking of digital media (Morimoto, Page 107, Column 1, Paragraph 1; Column 2, Paragraph 1).

As per Claim 26, Brewer fails to disclose a marking system to embed an invisible watermark into at least said video recording.

Morimoto discloses a marking system to embed an invisible watermark into at least said video recording (i.e. *"This group of technologies provides methods to "imprints" additional data or messages into multi-media contents such as still image, video, and audio data. Generally, the imprinted data is invisible (or inaudible) to the ordinary users, and is difficult to be separated from the host media."* The preceding text excerpt clearly indicates that an invisible watermark (e.g. audio or video signal) is imprinted into the content of the media using a marking system.) (Page 107, Column 2, Paragraph 1).

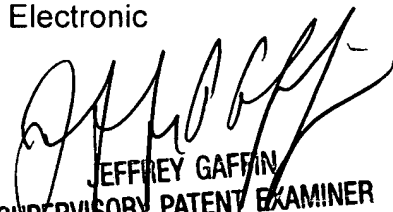
It would have been obvious to one skilled in the art at the time of Applicants invention to modify the teachings of Brewer with the teachings of Morimoto to include a marking system to embed an invisible watermark into at least said video recording with the motivation of providing a technical solution to be used for copy write protection and tracking of digital media (Morimoto, Page 107, Column 1, Paragraph 1; Column 2, Paragraph 1).

Points of Contact

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael J. Hicks whose telephone number is (571) 272-2670. The examiner can normally be reached on Monday - Friday 8:30a - 5:00p.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jeffrey Gaffin can be reached on (571) 272-4146. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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